



OpreX™ Control Devices

Single Loop Controller Replacement Catalogue

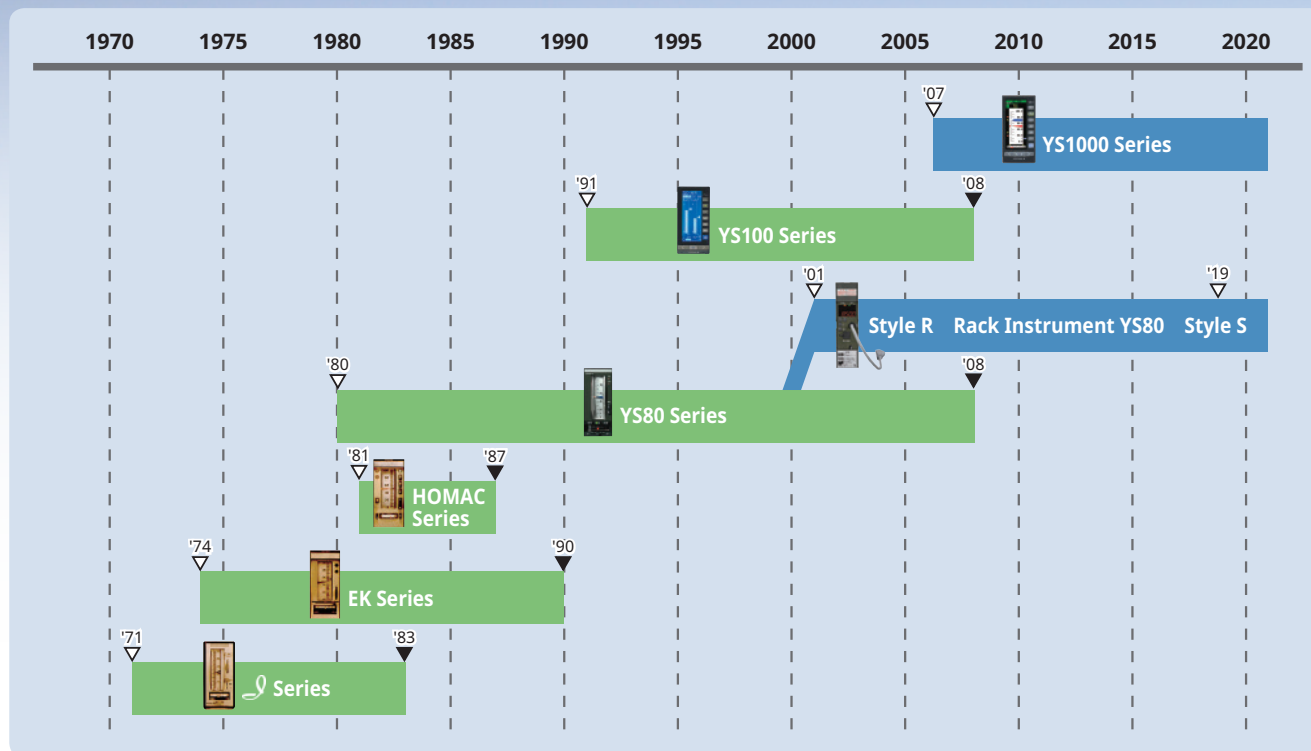
YS1000 Series Single Loop Controller
YS80 Series Rack Instrument

To customers who are using our single loop con

If something seems wrong, it's

Planned replacements of instrumentation devices are essential for contin

History of Yokogawa Electric single-loop controllers and rack instruments



YS1000 Series

A YS beyond....

Adding value for the customer

We are continuing to offer the YS1000, representing the quality and reliability we have cultivated over the decades.

High reliability

Dual CPU and manual control ensure high reliability.
Improved maintainability

Easy to upgrade

With the YSS1000 setting software, you can convert your SLPC and YS170 programs with YS1700 programs.
YS100 and YS80 compatible models also available.

Incredibly easy to read display

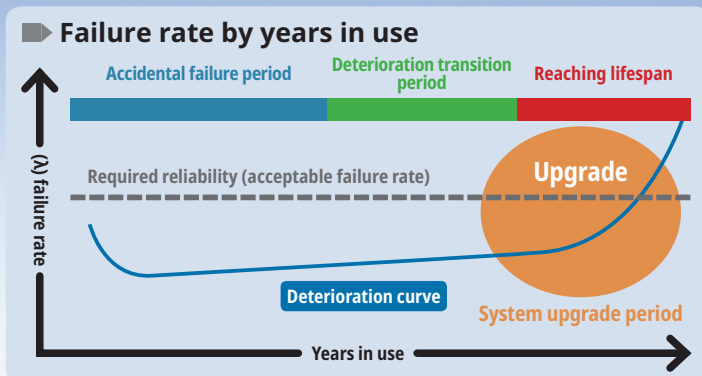
TFT LCD makes it even easier to read.

- Even wider viewing angle (at least 1.5 times wider than our previous model)
- LED back light for brighter performance (at least 2.5 times brighter than our previous model)
- Greater contrast (at least 20 times greater than our previous model)



controllers and rack instruments time to upgrade.

used stable operation of the plant.



Preventive maintenance is required to continue stable long-term operation of your plant. By replacing instruments according to their service lives, you can prevent trouble and stabilize plant operation.

Goal: Maintenances and upgrades for zero failures

Step 1 Plan

Approx. 8–10 year

Instrumentation panel operation status survey
Create a replacement plan, draft an annual budget
Instrument preventive maintenance

Step 2 Action

Approx. 10–12 years

Replacement implementation survey
Implement replacements, train operators

Step 3 Finish

Approx. 12–15 years

Replacements complete

YEW SERIES 80 Rack instruments with high reliability and proven technology

A highly reliable rack instrument YS80 has abundant operational performance since its launch in 1981.

Style *S*



- mV, Temperature and Potentiometer/ Voltage Converter STED
- Alarm Unit SKYD
- mV and Temperature Alarm Unit SALD
- Integrator SIND
- Isolator SISD
- Distributor SDBT, SDBS

Style *R*



- Digital Alarm Unit SDAU

Long-term stable supply

Uses the latest electronic components

Easy maintenance

High compatibility with conventional model

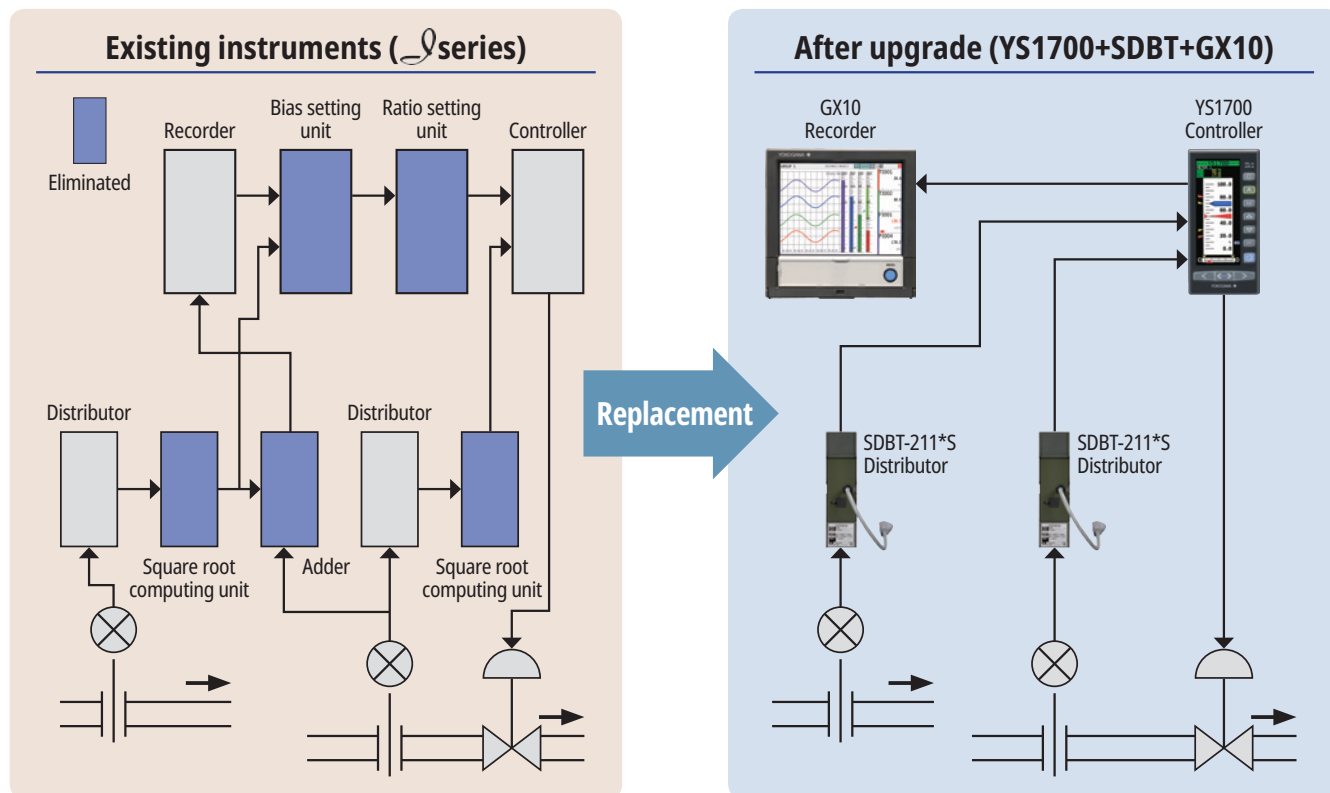
Requires less spare parts

Universal input and square root function switching type

Efficiently aggregate functions for further expansion

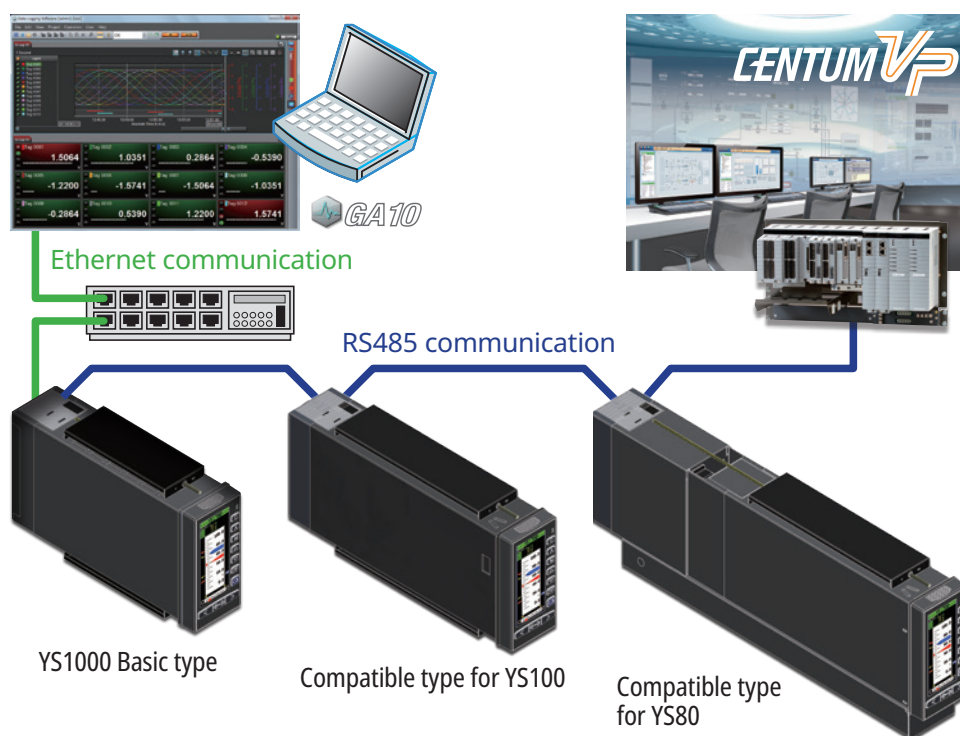
Example: Replacing the *I* series

- (1) You can aggregate the distributor and square root computing unit on the SDBT-211*S.
- (2) You can aggregate all kinds of computing units on the YS1700 program function.
- (3) You can switch from chart to paperless recorders. (The panel mount dimensions will change.)



Expand through communication functions

RS485 communication available on the YS80- and YS100-compatible models. Ethernet communication (Modbus/TCP) is available on the YS1000 basic model.

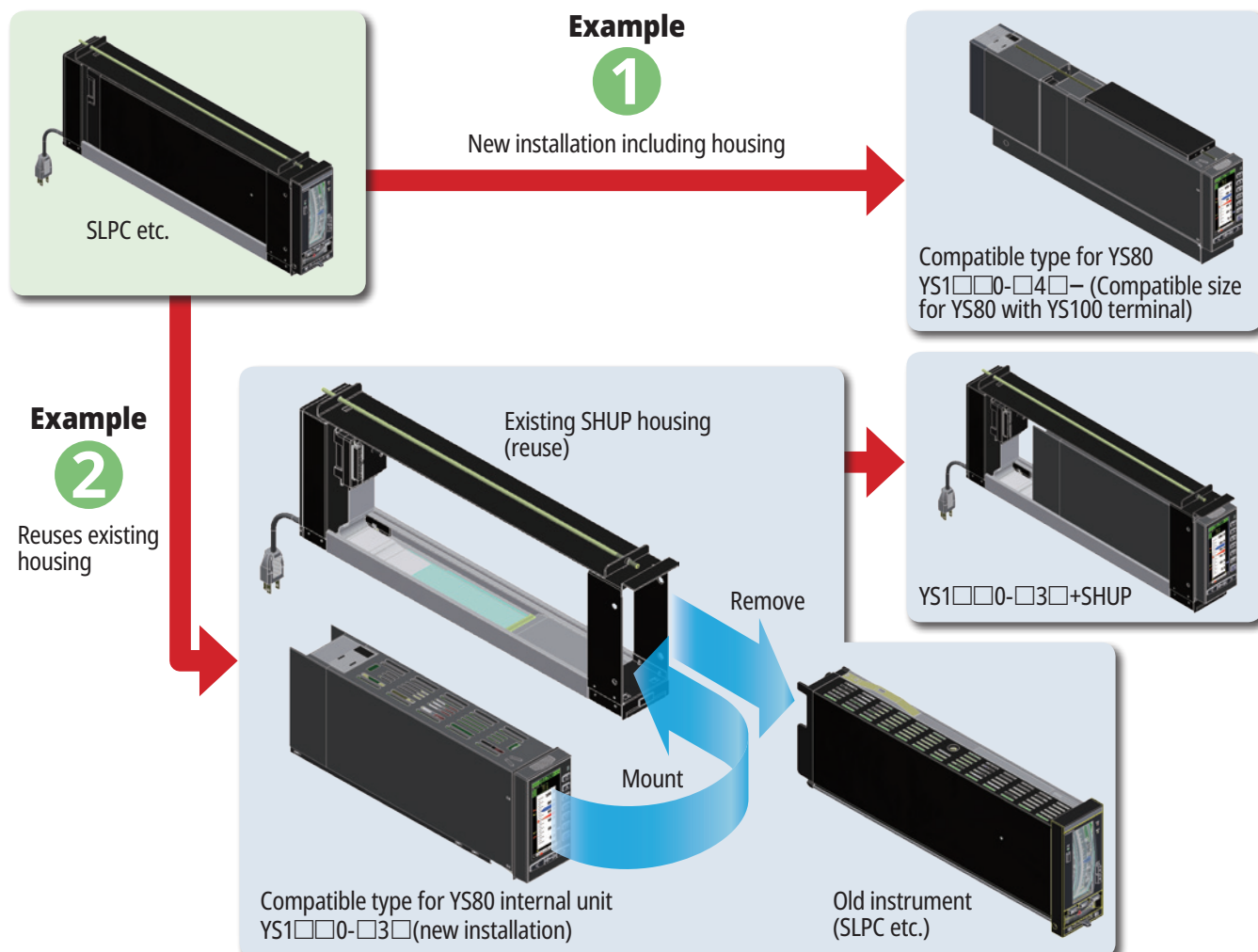


Replacing is easy

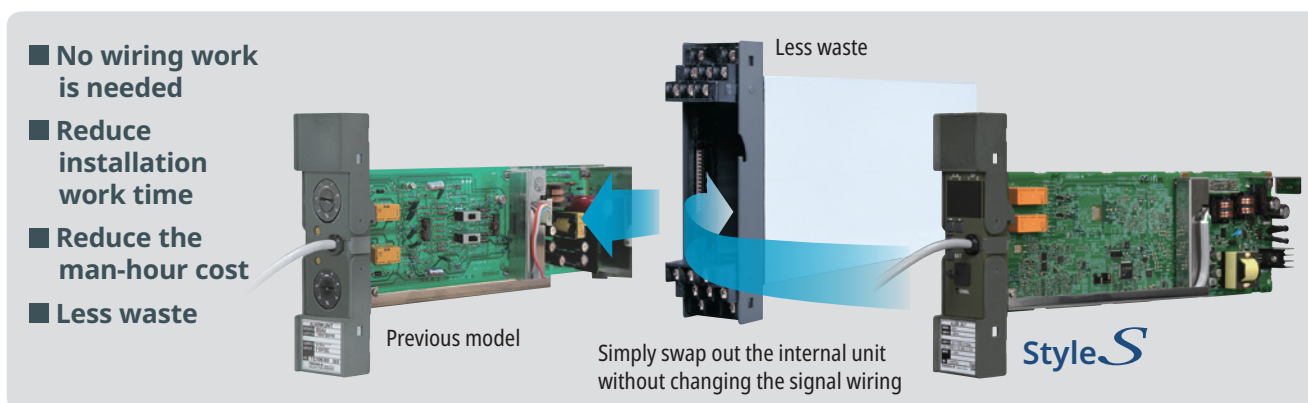
Reduces the labor and cost of refurbishing your existing boards

With the YS1000 series, replacement cases and housing are available for Yokogawa-made older instruments (YS100, YS80, EK, HOMAC, EBS, 100 line each series). You can replace existing instrument panels rather than reworking them.

When replacing YS80 series panel instruments, we offer models that leave the existing SHUP housing while replacing the internal unit, and models that replace with new housing.



For the YS80 series rack instrument, you can leave the case as-is, and replace the internal unit without changing wiring.



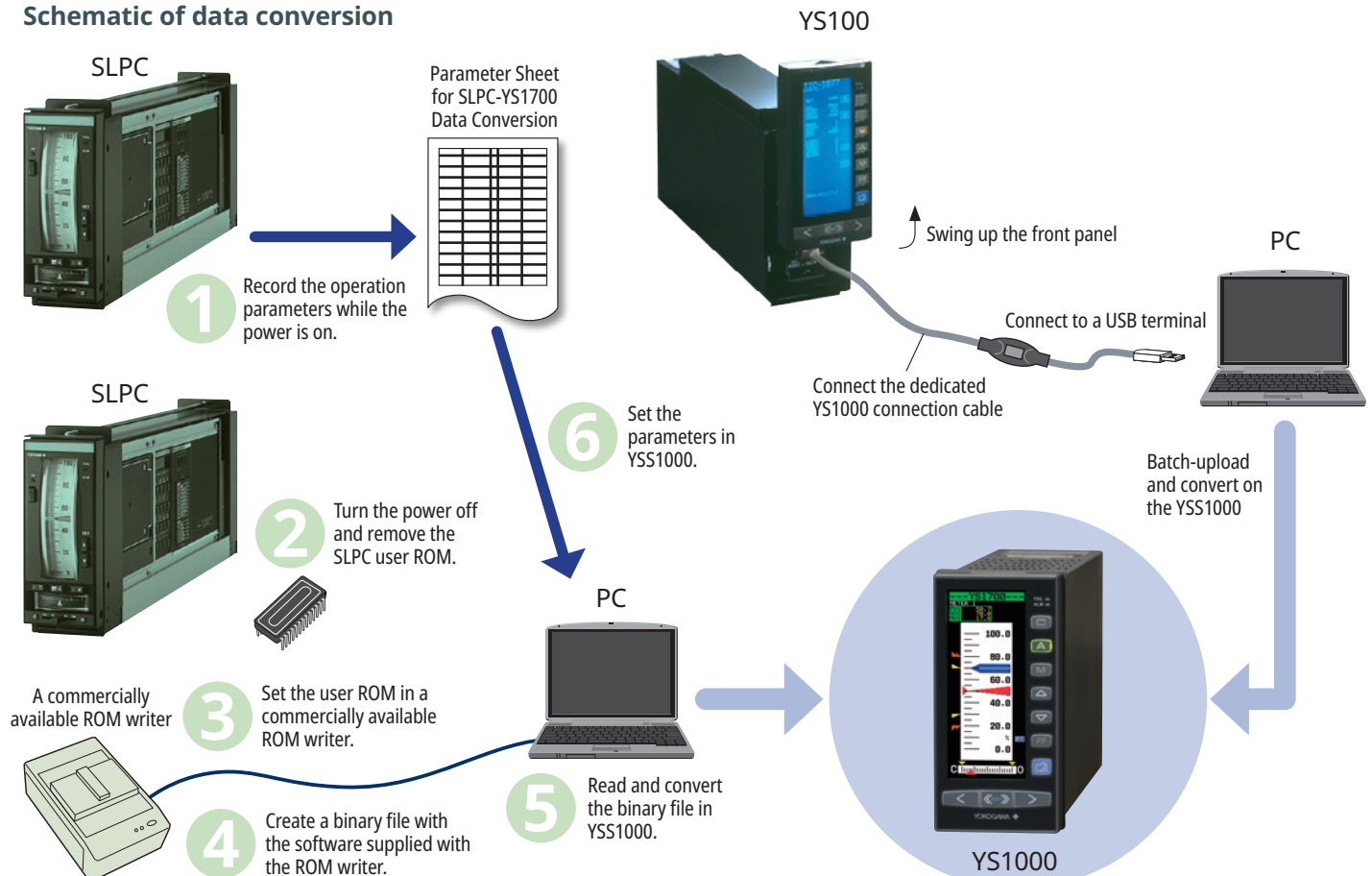
Convenient upgrade assist tool

With the YSS1000 setting software, you can smoothly switchover assets from your SPLC and YS100. Also, using the YSS1000 inspection support function, you can collate with your past inspection results.

From SLPC to YS1700

From the YS100 series to the YS1000 series

Schematic of data conversion



YSS1000 Check Support Function

This function indicates check procedures for maintenance person by showing Check Operation Guide windows on the YSS1000 screen.

The check result can be recorded in the internal memory of the YS1000 series or saved in the PC. It can be printed on reported format.

Main check items

- Input / output check(X,Y,DI,DO)
- Display function check(LCD, LED, operation KEY)
- Hard manual function check
- Record of Model name, serial number, check date, checker

Perform FAIL action inspections that are normally difficult.

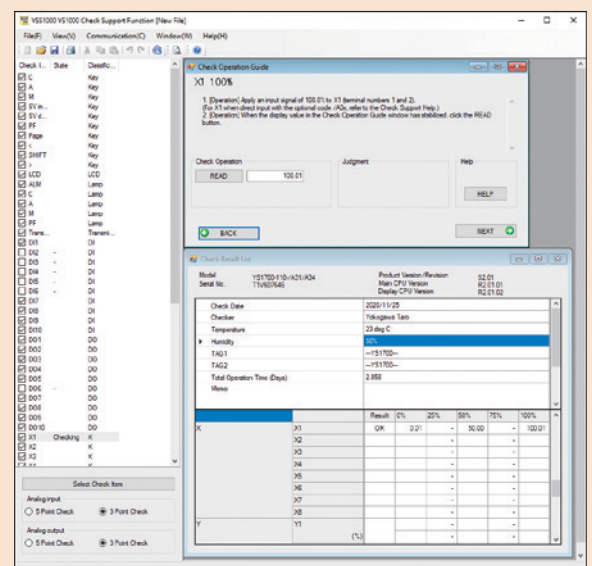


Table of replacement instruments

(For details, see the specifications.)

Product	Series	EK,HOMAC	YS80/YS100	YS1000/YS80*S/JUXTA
Indicating Controller	ICE 5241, 5341	EKC210, 220, 230A	SLPC, SLCD, YS170, YS150	YS1700, YS1500
Deviation Indicating Controller	ICD 5242, 5342	EKC260A	Same as above	Same as above
Indicating Controller With Pulse Width Output	5249, 5349	---	SLMC	Note 4
ON/OFF Indicating Controller	IKH 5248, 5348E	---	SLPC, YS170	Y1700
Manual Station	IML 5□43-1□00	EKX263A	SLMD-100	YS1360
Auto/Manual Station	IML 5□43-3000	EKX262A	SMST, YS135, YS136	YS1350, YS1360
Setting Unit	---	EKX267A, 268A	SMST	YS1360
Ratio Set Station	IRO 5245, 5345	EKX261, 264, 265, 266A	SMRT	YS1700 (with the SMRT sample program)
Auto selector	IAS 5246, 5346	---	SLPC, YS170	YS1700
Computing Station	---	EKX245A, 223A	SCMS	YS1700
Indicator with Alarm	---	EKX241A, 242A	SCMS, YS131	YS1700, YS1310
Computing Station	IPL 5247, 5347	---	SCMS	YS1700
Standby Manual Station	IPB 5244, 5344	EKX134	SPBD, YS110	YS110
Indicator	IH15 413□	EKM215	SIHN	Please inquire for panel direct mounting indicator. YS1310 (power supply required) Note 3
Indicator with Alarm	IH15 413□	EKR201A, EKM215L	SIHM, SIHK, YS131	YS1310
Indicator	---	EKR17A, 18A	YS131	YS1310
Indicator with Alarm	IKH 5248, 5348	EKM216	SIHK	YS1310
Chart Recorder	IRV 4131, 4132	EKR33W	SRVD	Update SJBD+SRVD to the GX10 Note 3
Chart Recorder	---	EKR230A	SRHD	GX10 Note 3
Selector Station	IJB 4252	EKZ411B	SJBD	Update SJBD+SRVD to the GX10 Note 3
Integrator	---	EKI201, 202, 204A	XJ5091	Please inquire for analog signal integrator.
Batch Blending Control System	BCS	DBS, DBX	YS-BCS	Please inquire for batch instruments.
mV, Temperature and Potentiometer / Voltage Converters	ITE 5251, 5351	EKT20□B, EKX202B	STED	STED*S
Alarm Unit	IKY 5252, 5352	EKX241B-A-B	SKYD	SKYD*S
Digital Alarm Unit	---	EKX241B-A3/4 B3/4	SPLR+SKYD, SDAU	SDAU*R
Alarm Unit	---	EKX241B-C-D	SPLR+SKYD, SDAU	SKYD*S, MXT x 2 + SDAU*R Note 2
Alarm Unit	---	EKX242B	SKYD	SKYD*S
mV and Temperature Alarm Unit	---	---	SALD	SALD*S
Square Root Extractor	ISQ 5253, 5353	EKX222B	SDBT-□11 option	SDBT-211*S option SISD-101*S
Integrator with counter	ISN 5□61+5217	EKX226B, 227B	SIND+SICD	SIND*S + Counter
Programmable Computing Unit	ICM 5254, 5354	EKX223B, 224B	SPLR	MXT (3 inputs, 1 output) Note 1, 2
Programmable Computing Unit	4823, 4824	EKX204, 205, 206, 212, 214, 221, 228B	SPLR	MXT (3 inputs, 1 output), VJXS Note 1, 2
Programmable Computing Unit	IPL 5255, 5355	---	SPLR	MXT (3 inputs, 1 output), VJXS Note 1, 2
Isolator	IST 5258, 5358	EKX201B	SISD	SISD*S
Reversal Unit	IBS 5257, 5357	---, EKX207B	SISD	SISD*S
Limiter, Selector	ILS 5256, 5356	EKX245B, 256B	SPLR	MXT (3 inputs, 1 output) Note 1, 2
Distributor	---	---	SDBU-21□	For a 24 V transmitter power supply, SDBT-21□*S. For 48 V transmitter power supply instruments, consider a 24 V, 4-20 mA instrumentation loop.
Distributor	---	---	SDBU-24□ 4 points	For a 24 V transmitter power supply, 4-loop isolated VJA7 x 4 Note 2. For 48 V transmitter power supply instruments, consider a 24 V, 4-20 mA instrumentation loop.
Distributor	IDB 5267, 5367	---	SDBT-210	SDBT-210*S
Distributor	IDB 5268, 5368 5 points	---	SDBS, SDBT-210	SDBS*S, SDBT-210*S 5-loop isolation VJA1 x 5 Note 2
Pulse Computing Unit	5281, 5381	---	SPCM	VJP8 Note 2
Communication Interface Unit	---	---	SCIU	Note 5
Power Supply Unit	IDN 5265	EKX418B	---	FPSU Note 2
Power Supply Unit	IDN 5266 10A	EKX440B 10A	SDND 15A	SDND 15A
Arrester	---	X330	SCOTT-AR	JUXTA-AR Note 2
Memo	52xx is 24 VDC drive 53xx is 100 VAC drive	End A is the panel instrument End B is the rack instrument		Note 1: Supports the first- and second-stage controllers with the YS1700 program calculation Note 2: JUXTA series Note 3: Panel mount change Note 4: For valve feedback, upgrade with YS170+UZ011/Z. If no valve feedback, please inquire. Note 5: RS485 available with the YS1000

Replacement related documents

- YS1000 Series Replacement Manual (Functional Enhancement) (Document number: IM 01B08H02-01EN)
- YS1000 Replacement Guide Overview, Model Conversion (Functional Enhancement) (Document number: TI 01B08A02-05EN)
- YS1000 Series Replacement Guide Installation and Wiring (Functional Enhancement) (Document number: TI 01B08A02-06EN)
- YS1000 Replacement Guide YS170 → YS1700 User Program Conversion (Functional Enhancement) (Document number: TI 01B08A02-07EN)
- YS1000 Replacement Guide SLPC → YS1700 User Program Conversion (Functional Enhancement) (Document number: TI 01B08A02-08EN)

Related Products

SHUR Rack Case



Rack case (fits all models). Use when ordering the internal unit and rack case separately.

SDND Power Supply Unit



25 V DC constant power supply.

JUXTA Signal Conditioner



Space-saving, plug-in type signal conditioners.

Web site

See the general specifications for detailed model-specific specifications.

For questions on the YS80 series, see our FAQ.

<https://www.yokogawa.com/ns/ys/>



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